UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,257	09/19/2003	Robert J. Magyar	920047-94539	1147

7590 12/15/2006

Howard B. Rockman
BARNES & THORNBURG
P.O. Box 2786
Chicago, IL 60690-2786

EXAMINER	
NGUYEN, DANNY	
ART UNIT	PAPER NUMBER
2836	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/667,257	MAGYAR ET AL.	
	Examiner	Art Unit	
	Danny Nguyen	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-12,14,15 and 18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-12,14,15,18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/4/2006 have been fully considered. In view of these arguments, claim 2 is found persuasive and moot in view of the new ground(s) of rejection. Claim 14 is not persuasive.

Applicant argued that claim 14 is not rejected with respect to Tokahashi. Examiner respectfully disagrees with applicant's argument. Claim 14 is rejected with respect to Tokahashi (see the previous office action).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 2-12 are rejected under 35 U.S.C. 102(a) as being anticipated by Moran (USPN 6,757,149).

Regarding claims 2, 4, 6, 7, 11, 12, Moran discloses a valve control circuit (figures 3, 5, 7) comprises a process control apparatus (such as a controller 44, 54) generating a plurality of data signals (46, 56), each signal corresponding to an operating parameter of the valve (e.g. col. 3, lines 49-63), a valve control apparatus (e.g. valve controller 62) transmitting a voltage (such as a voltage waveform generated from 62) to the valve to the operation of the valve (20), the valve control apparatus receiving at least one operating data signal generated by the process control apparatus, the valve

having a current flow created therein upon receiving voltage from the valve control apparatus, a current sensing apparatus (current sensing resistor 68) senses the flow of current in the valve (col. 4, lines 1-6), the current sensing apparatus creating a signal (feedback signal) responsive to the current flow in the valve, the signal created by the current sensing apparatus applied to the valve control apparatus (see figure 2), the valve control controls the valve response to the signal from the current sensor, wherein a first polarized current (current wave form in figure 3, col. 2, lines 30-33, lines 60-66) is established in the valve to initiate motion of the valve in a first direction, a second reduced current (34) is established in the valve to stabilize the position of the valve in a first predetermined position (col. 3, lines 12-15).

Regarding claims 3, 5, Moran discloses a third oppositely polarized current is established in the valve to initiate motion of the valve in a second direction, a second reduced current (42) is established in the valve to stabilize the position of the valve in a second predetermined position (see figure 7).

Regarding claims 8-10, Moran discloses upon the detection of a predetermined current on the valve, reduces the current applied to the valve (col. 4, lines 1-26).

3. Claims 14, 15, 18 are rejected under 35 U.S.C. 102(a) as being anticipated by Near (USPN 6,978,978).

Regarding claims 14, 15, 18 Near discloses a method of controlling the operation of an electrically controlled valve comprises (figure 2b, 3) comprises creating a plurality of first electrical signals that correspond to at least one of the operation and control

instructions for the electrically controlled valve (such as current magnitude, change voltage, col. 4, 5, lines 56-7), transforming the first signals into plural second signals and transmitting the second signals to controlled valve (15) (e.g. col col. 7, lines 1-26, and figure 2B), sensing the current level (current sensor 20) and providing a third signal (feed back signal from sensor 20), and providing a current to the valve responsive to the third signal (col. 7, lines 6-26), wherein the controlled valve includes a coil (14).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (571)-272-2054. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DN

DN
12/6/2006

BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800